

REMARKS

The Examiner maintained the rejection of claims 13-14, 18, 23-24 and 34 under 35 U.S.C. § 102(e) as being anticipated by published U.S. Patent Application No. 2003/0036389 by Yen ("Yen") (now U.S. Patent No. 6,539,230). To support a rejection under § 102, a single prior art reference must disclose each and every claim element. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), MPEP § 2131. Furthermore, the prior art reference must show each element "arranged as in the claim." *Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984).

Yen does not disclose storing the geographic coordinates of a central point of a wireless communication network coverage area. The only location(s) stored in Yen are previous position fixes of the mobile terminal itself. p. 3, 0025-0031. In Response to Arguments, the Examiner asserted that "taking the central point as the reference position is non-critical and obvious to one of ordinary skill." The Examiner is not free to disregard a claim limitation by characterizing it as non-critical<sup>1</sup> – the claim must be construed from the point of view of one of ordinary skill in the art. "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). One of ordinary skill in the wireless communication arts would not equate the random previous location of a mobile terminal with the known central point of the coverage area of a wireless communication system. Nor would one of ordinary skill in the art believe it inherent that a mobile terminal's previous position would necessarily always (indeed, ever) be the central point of a wireless system coverage area. Hence, the § 102 rejection must be withdrawn.

Assuming that the Examiner has impliedly replaced the § 102 rejection with a § 103 rejection, Applicant respectfully traverses this rejection. The Examiner asserted that the storing

---

<sup>1</sup> Criticality is not an element of patentability.

the location of the central point of a wireless system service area is non-critical and obvious, citing to the following passage in the specification (p. 18, lines 7-13):

The format of the location information may take various forms. In its simplest representation, the location is a single position. A more useful representation would be a single position and a radius, defining a circular area. An odd-shaped system may be described by multiple positions defining a boundary, forming a polygon when connected by straight lines. A wide variety of other modes of identifying boundaries of a coverage area may be utilized, as known in the art, and as may be determined by one of ordinary skill without undue experimentation.

The disclosure of a plurality of modes or embodiments of an invention does not render any one of them obvious. In disclosing the best mode of the invention, as Applicant is legally required to do, Applicant in the preceding paragraph explicitly disclosed three formats in which private wireless system location information may be stored, and noted that many other modes of identifying the system boundaries may be used. As stated, these other modes may be known in the art, or determined by one of ordinary skill. Such an observation in the specification – that the explicitly disclosed formats are not exhaustive – does not render obvious the system location formats that are explicitly disclosed.

In fact, the specification discloses the particular utility of storing a private system location as a central point, at p. 12, lines 10-13:

The location of known private systems to which the user has access can be stored in the mobile terminal 20. For example, a central point in the PWTS 200 or other private system may be stored in the mobile terminal 20 as the reference position and the distance threshold may be a radius R which defines an area encompassing the facility 205. When the position estimator 50 indicates that the mobile terminal 20 is close to a known private system (i.e., the distance from the current position of the mobile terminal 20 and the stored location is less than a predetermined threshold distance), the mobile terminal 20 may trigger a search for a control channel associated with the PWTS 200 and acquires service with the PWTS 200 if a control channel is found.

The central point with a radius threshold is thus disclosed as being a particularly efficient wireless system coverage area location format, requiring the storage only of a single location (the central point) and a radius. A mobile terminal then need only obtain a position fix, compute

the distance from itself to the central point, and compare that distance to the stored radius, or distance threshold, to determine whether to initiate a search for a control channel in the private system.

Yen does not render obvious the storing in a mobile terminal of the central point of a known wireless communication system, to search for a control channel of the communication system in response to the distance from the mobile terminal to the central point. Yen discloses a mobile terminal searching for a new control channel (DCCH) based on the distance (L) from its current location ( $x_{current}, y_{current}$ ) to a previously determined location ( $x_i, y_i$ ). p. 3,

paragraphs 0025-0031. Yen does not disclose, teach or suggest that the mobile terminal stores the central point of a wireless system, and does not disclose searching for a control channel based on the distance from the mobile terminal to the central point of the wireless system. Rather, Yen discloses only that a search for a control channel is initiated based on the distance from the mobile terminal to a previous position of the mobile terminal – any previous position. In other words, Yen initiates a search whenever the mobile terminal has moved a sufficient distance from its last position – in any direction. In contrast, claims 13, 23 and 34 recite computing the distance from the mobile terminal to the central point of a known, desired wireless system coverage area, and initiating a search based on that specific distance.

The teaching of Yen – monitoring the distance a mobile terminal may have traveled since its last position update – is completely irrelevant to the present invention of claims 13, 23 and 34. Similarly, the geographic center or extent (e.g., radius) of a given coverage area or cell of a wireless system is completely irrelevant to Yen – Yen simply monitors the distance it has moved since a previous update, and initiates a new control channel search, or not, based solely on that distance. The two methods of triggering a control channel search are inapposite.

The Examiner has cited no suggestion or motivation for modifying Yen to replace a previously determined mobile terminal position with the central point of a wireless system cell (which would require that Yen know or learn such a point – about which Yen is, naturally, silent).

There being no motivation in Yen itself, the examiner must articulate a motivation for such combination derived from the art generally. MPEP § 2143, *et. seq.* In doing so, the examiner must provide “an explanation based on logic and sound scientific reasoning that will support a holding of obviousness.” *Ex parte Levengood*, 28 USPQ2d 1300, 1301 (Bd. Pat. App. & Inter. 1993) (emphasis added).

To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

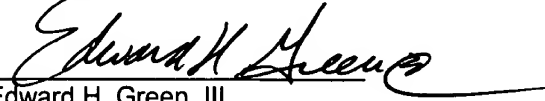
*Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985) (emphasis added),  
See also, MPEP § 2142 (“The examiner bears the initial burden of factually supporting any *prima facie* case of obviousness.”) (emphasis added).

The Examiner has provided no factual support for the modification necessary to reject claims 13, 23 and 34 over Yen, no convincing line of reasoning as to why a skilled artisan would find claims 13, 23 and 34 obvious in light of Yen's teachings, and no explanation based on logic or sound scientific reasoning to support a holding of obviousness. Indeed, the examiner has offered no factual support, reasoning, or explanation at all – only the conclusory assertion that storing the central point of a wireless system “is non-critical and obvious to one of ordinary skill.” This is insufficient to establish a *prima facie* case of obviousness. Accordingly, claims 13, 23 and 34, and all claims depending therefrom, define non-obviously over Yen, and the rejection of these claims must be withdrawn.

Prompt allowance of all pending claims is hereby respectfully requested.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.



Dated: June 8, 2004

Edward H. Green, III  
Attorney for Applicants  
Registration No.: 42,604

P.O. Box 5  
Raleigh, NC 27602  
Telephone: (919) 854-1844